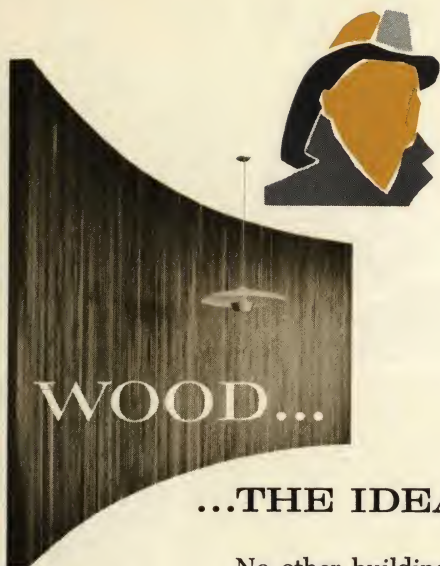




BAXCO  **PYRESOTE**
FIRE RETARDANT
LUMBER AND PLYWOOD



...THE IDEAL BUILDING MATERIAL

No other building material offers as many advantages as wood. It is low in cost, readily available. Wood is strong — yet light in weight; it is flexible, easy to cut, shape and handle. Wood has exceptional insulating values, and for decorative uses, no other material can match the warmth and beauty of wood.

UNTREATED WOOD IS COMBUSTIBLE

Man has always associated wood with fire. Until recently this inherent combustible property of wood has limited its use, particularly for decoration and trim in buildings of public assembly, where the use of materials which assist the spread of flames can contribute to fire hazard. Building codes in most major cities in the United States are very specific as to the flame-spread ratings of materials that may be used for interior wainscoting, paneling or other finish applied structurally or for decoration, in public buildings. The tragic Chicago School fire in 1958 has lent impetus to this national concern over fire hazards.

HOW WOOD BURNS

Wood rarely burns directly. Exposed to sufficient heat it first pyrolyzes to form gases and highly combustible tars that escape and leave charcoal behind. Some of the escaping gases burst into flames when they mix with air. Fire spreads chiefly by such gas-fed flames.

Experts in the field of fire prevention and building codes are unanimously agreed that combustible material, including wood, must have a limited flame-spread in prescribed occupancies and locations.

A flame-spread rating is a measure of the speed at which a flame will travel over the surface of a material exposed to fire. Other factors are also taken into account, but in determining the relative combustibility of a material the flame-spread rating is most important.

SCIENCE LEARNS HOW TO FLAME-PROOF WOOD

Now, however, science has discovered a method for deeply impregnating lumber and plywood with fire-retardant chemicals by pressure processes. These chemicals act as catalysts to form less combustible gases, thereby inhibiting the spread of flames. The result is a building material which meets Building Code flame-spread requirements; which carries the Underwriters' Laboratories, Inc. label, and which is classed as incombustible by certain insurance companies for specific uses.

This product is BAXCO fire-retardant pressure treated wood produced by J. H. Baxter & Co., San Francisco, California.

HOW BAXCO-PYRESOTE REDUCES FIRE HAZARDS

BAXCO fire-retardant pressure treatment retards flame-spread in lumber and plywood when exposed to fire, reduces fuel contribution and smoke density and causes burning to cease when the ignition source is removed or exhausted.

In addition to retarding the spread of flame of wood products, BAXCO fire-retardant treatment serves the following practical purposes: prevents rapid ignition of surfaces by fires, provides an additional interval of time for occupants to escape burning buildings,

In modernizing the old wing of this hospital in San Francisco, Architect John Funk achieved friendly warmth in the lobby with the use of walnut paneling. By using BAXCO fire-retardant pressure treated walnut paneling, Mr. Funk also met fire safety code requirements. Hart & Hynding, San Francisco, were the contractors.

Behind this floating wall in a solarium in the new Stanford University Hospital is a warming kitchen. To reduce fire hazard Architect Edward D. Stone, Palo Alto, used BAXCO Douglas Fir plywood pressure treated with Pyresote. This backing is covered with 1/4" untreated teakwood. Rothschild & Weirick, San Francisco contractors.

1/4" 5/8" Pyresoted Furred con- 5/8" Pyresoted
teakwood D.F. Plywood crete slab plywood

Close-up construction detail of wall shown at right. Now being completed, the new hospital on the Stanford campus at Palo Alto will rank as one of the country's finest. BAXCO fire-retardant pressure treated plywood was used in the six solariums and dining room as backing for the decorative teak.



minimizes the possibility of people panicking, keeps exit passages free of flames longer, and preserves property and capital values. The retarding effect against the spread of fire provides additional time for fire departments and protective measures to come into play with consequent reduction of loss.

LABELED BY UNDERWRITERS' LABORATORIES, INC.

The Underwriters' Laboratories, Inc. (U. L. 723), standard test method for fire-hazard classification of building materials is used to determine the flame-spread rating of combustible materials, including wood. The purpose of the test is to determine the comparative fire hazard classification by evaluating the rate of flame-spread over its surface, rate of combustion and heat generated and the smoke density developed when attacked by fire. An Underwriters' Laboratories, Inc. label showing flame-spread and other pertinent information is affixed to each piece of "BAXCO"-Pyresote lumber or plywood.

Baxter facilities for fire-retardant pressure treatment are under Underwriters' Laboratories, Inc. continuous factory inspection and label service, thus assuring the buyer uniform high quality and protection.

BAXCO-PYRESOTE EXPANDS WOOD USES

BAXCO fire-retardant pressure treated lumber and plywood is useful wherever limited flammability is desired or required.

BAXCO treated lumber and plywood is less combustible and may be used in places where untreated wood is forbidden by building regulations. For instance, in Group A through H Occupancies, the Uniform Building Code requires, with some exceptions, that the flame-spread rating of building materials for interior finishes shall not exceed 25 for vertical and 75 for horizontal exitways. This almost precludes the use of untreated lumber or plywood within these exitways. BAXCO-Pyresote fire-retardant materials meet these code requirements. Authorities having jurisdiction should be consulted for specific details.

Architects and engineers can incorporate the utmost in safety, comply with building code requirements, and utilize the natural beauty and warmth of wood by designing with "BAXCO" fire-retardant lumber and plywood.

For decorative purposes all the advantages of wood may be retained, at low cost, by veneer-core (plywood) construction. With this method an untreated finished face of any species is glued to a fire-retardant treated plywood core. Treated cores with untreated faces are permitted by most code enforcement authorities.

BAXCO-PYRESOTE IS THOROUGHLY TESTED

A number of tests have been developed over a period of many years for evaluating the effectiveness of fire-retardant pressure treatment. These tests include:

1. Crib Test (ASTM-E160)
2. Fire-Tube Test (ASTM-E69)
3. The Federal Specification Test SS-A-118 (b)
4. Fire Hazard Classification Test No.723, commonly called the Tunnel Test, and developed by Underwriters' Laboratories, Inc.

Results of these tests determine whether or not a material conforms to building regulations.

BAXCO fire-retardant pressure treated lumber and plywood meet these requirements. Your assurance of receiving uniform quality pressure treated fire-retardant forest products is the Underwriters' Laboratories, Inc. label which is affixed to each sheet of BAXCO plywood or lumber designating its flame-spread rating.

BAXCO-PYRESOTE CAN REDUCE FIRE INSURANCE RATES

BAXCO-Pyresote fire-retardant pressure treated Douglas fir lumber has qualified for insurance rate reductions by successfully passing the Underwriters' Laboratories, Inc. requirements for a fire hazard flame-spread classification of 25 or less and evidence of no significant progressive combustion when subjected to tests of 30-minute duration.

As a result, BAXCO-Pyresote fire-retardant pressure treated 2-inch Douglas fir decking is classed as incombustible by a large number of insurance groups throughout the United States. For specific rate reductions consult the rating bureaus in your vicinity.

BAXCO-PYRESOTE OFFERS 3-WAY PROTECTION

In addition to its approved fire-retardant qualities, the BAXCO-Pyresote chemical formulation will successfully resist damage caused by termites and other insects, as well as decay-producing fungi.



This photo shows part of the construction underway on U.S. Army Nike guided missile sites in the Fairbanks, Alaska, area. Thousands of feet of BAXCO fire-retardant pressure treated Douglas fir lumber and plywood will help protect these remote installations from fire. Sites are being built by the Peter Kiewit Construction Company under contract to the U.S. Army Engineer District, Alaska.

(Below) BAXCO PYRESOTE REDUCES SCHOOL FIRE HAZARDS. Architects Warneke & Warneke, San Francisco and Oakland, chose fire-retardant treated lumber for window sash, frames and interior trim in the new wing of the Alameda High School, at Alameda, California. Construction was performed by Pacific Coast Builders.



To reduce fire danger in the locker room and shop building of the Redwood High School, Larkspur, California, 52,000 board feet of 2 x 6 T. & G. roof decking, pressure treated with BAXCO fire-retardant Pyresote, went into the construction. As shown, it can be painted as readily as untreated wood. Architects were Gromme, Mulvin & Priestley, San Rafael, California.



- (A) Sample of Underwriters' Laboratories, Inc. label which identifies all BAXCO pressure treated fire-retardant plywood.
- (B) Sample of Underwriters' Laboratories, Inc. label which identifies all BAXCO pressure treated fire-retardant lumber.

BAXCO

Fire Retardant
PYRESOTE-TREATED
DOUGLAS FIR, PLAIN OR MAHOGANY - FACED
PLYWOOD

J. H. Baxter & Co., 120 Montgomery St., San Francisco 4, Cal.

Underwriters' Laboratories, Inc.
INSPECTED
PLYWOOD
ISSUE NO. E340

FIRE HAZARD CLASSIFICATION
(BASED ON 100 FOR UNTREATED OAK)

FLAME SPREAD	15
FUEL CONTRIBUTED	25-30
SMOKE DEVELOPED	0-15

Underwriters' Laboratories, Inc.
INSPECTED
TREATED LUMBER
ISSUE NO. 26
FIRE HAZARD CLASSIFICATION
(BASED ON 100 FOR UNTREATED RED OAK)

FLAME SPREAD	25	15-25
FUEL CONTRIBUTED	25-30	25-30
SMOKE DEVELOPED	0	0-10

"BAXCO"
FIRE-RETARDANT
PYRESOTE-TREATED
J. H. BAXTER CO.
120 MONTGOMERY ST.
SAN FRANCISCO, CALIFORNIA

*FLAME SPREAD NOT OVER 25 AND NO EVIDENCE OF SIGNIFICANT PROGRESSIVE COMBUSTION IN 30 MINUTE TEST DURATION.

(B)

Beauty... Safety... Economy



THE UNITED NATIONS BUILDING, NEW YORK CITY. Untreated wood, for decorative use, contributes greatly to flame-spread in the event of fire. The decorative paneling at the U.N. Building is fire-retardant treated to meet code requirements.

"The fire insurance rating bureaus in a number of mid-western states have recognized that roofs constructed of approved impregnation-treated wood (minimum deck thickness 2" nominal; minimum beam thickness 4" nominal), listed and properly identified as having a flame spread classification not exceeding 25, and showing no evidence of significant progressive combustion when subjected to at least 30 minutes test duration, should be classed as incombustible. Thus, by providing this type of roof deck on a one-story masonry building, the insurance rates can in many instances be substantially reduced."

Excerpt from a letter received from K. H. Parker, manager, Western Actuarial Bureau, an advisory organization to fire insurance rating bureaus.

BAXCO
Pyresote
fire-retardant
lumber can
help reduce
fire insurance
rates!

FIRE PROTECTED WOOD APPROVED FOR CLASS 1 ROOF DECK

WASHINGTON, D. C.—New fire protective treatments now permit wood to be approved as Class 1 roof decks for risks underwritten by Factory Insurance Assn. and Factory Mutual, Paul R. Beattie of the National Lumber Manufacturers Assn. said recently.

Also qualifying for the incombustible recognition, he said, is impregnated lumber listed by Underwriters' Laboratory as having fire hazard classification less than 25, and evidence of no significant progressive combustion when subjected to tests of 30 minute duration.

(Reprinted from Daily Pacific Builder,
Thursday, March 26, 1959.)

BAXCO fire-retardant Douglas fir lumber, pressure treated with Pyresote has qualified for the Underwriters' Laboratories, Inc. listing described above.

A Statement by Joe R. Yockers, California State Fire Marshal:

"Combustible interior finishes of the halls, stairways and vestibules in buildings used for public assemblage constitute one of the principal fire and panic hazards. . . . There are now available for consideration by architects and engineers interior finishes that are both artistically acceptable for decorative purposes, and still meet fire code requirements."

BAXCO fire-retardant pressure treated lumber and plywood meet the requirements referred to by the California State Fire Marshal.

Teakwood paneling in the offices of the Irving Trust Co., New York City, is fire-retardant treated. Shreve, Lamb, Harmon were the architects. Cabinet work by D. Kramer & Sons.



Unusual beauty and warmth is achieved by the use of Brazilian rosewood in the offices of the Empire Trust Co., N. Y. C. Although New York's fire code is exacting, this veneer-faced paneling, with its fire-retardant treated core, meets requirements. Architects were Kahn and Jacobs, N. Y. C.





Offices of the American Car & Foundry Co., N. Y. C., express the warmth of wood paneling combined with the safety of fire-retardant treated cores, to meet New York City's fire code requirements.



Sliced walnut panels, from floor to ceiling, provide a restful background in the training center offices of Socony Vacuum Oil Co., Inc., N. Y. C. Here again the decorative beauty of wood is preserved by the use of veneer facings, backed by fire-retardant pressure treated cores, permitted under the New York fire code.



Entrance to the offices of George F. Getty II, President, Tidewater Oil Co. Corridor doors in Tidewater's beautiful Los Angeles building have BAXCO Pyresote fire-retardant treated frames of birch lumber. The untreated veneer facings, applied by General Veneer Manufacturing Co., South Gate, meet code requirements for a Class "B" fire door.



The Union Oil Building, Los Angeles, is one of the West's newest and finest. Designing for maximum safety, architects Pereira and Luckman used walnut faced doors, built by General Veneer Manufacturing Co., utilizing BAXCO fire-retardant treated birch frames.





*Arena seating for
1960 Winter Olympics
is protected by*

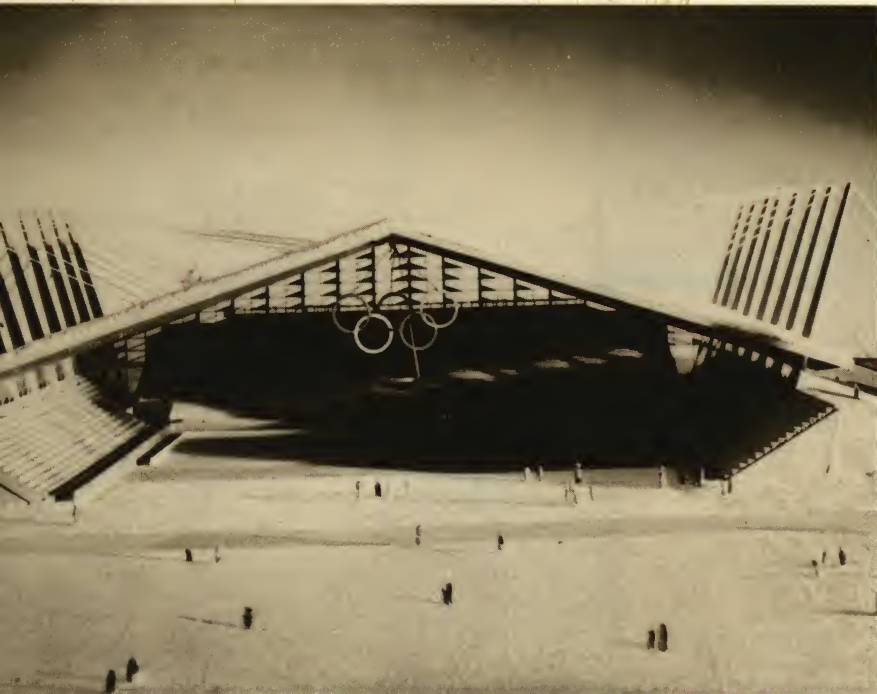
BAXCO PYRESOTE

*fire-retardant
wood.*

Squaw Valley, a remote snow-bowl hidden among the peaks of the High Sierras, near the California-Nevada line, will be the site of the 1960 Winter Olympic Games. In the past three years American architects, engineers, builders have transformed an isolated wilderness into a winter sports capital—complete with all facilities including housing for hundreds of athletes.

Focal point for the Winter Olympics will be the Olympic Arena, where hockey matches, speed skating and other events will take place. This huge structure, owned by the U. S. Government and built at a cost of \$3,000,000, will seat 8,000 spectators.

In a remote area such as Squaw Valley, the possible hazards of fire are increased. So, to provide the ultimate in protection, Corlett and Spackman, Kitchen & Hunt, Architects Associated, specified that several thousand wooden bleacher seats be constructed of BAXCO fire-retardant lumber pressure-treated with Pyresote. BAXCO protected, also, will be the wooden press boxes, counters and seats.



ARCHITECTS ASSOCIATED: Corlett and Spackman, A.I.A.,
Kitchen and Hunt, A.I.A.

STRUCTURAL ENGINEERS: H. J. Brunnier; John M. Sardis

CONSULTING ENGINEERS: Punnett, Perez & Hutchison

SANITARY ENGINEERS: Kennedy Engineers

MECHANICAL & ELECTRICAL ENGINEERS:
Vandament & Darmsted

GENERAL CONTRACTOR: Diversified Builders,
Paramount, California

SEATING CONTRACTOR: Independent Iron Works, Inc.,
Oakland, California



FIRE!

The roofing material burned when waste in plywood manufacturing facilities, occupying a former World War II blimp hangar at Tillamook, Oregon, burst into flames.

BUT TIMBER HANGER FRAME, BUILT OF PRESSURE TREATED FIRE RETARDANT LUMBER, STANDS UP!

When fire started on the inside of the thousand foot long hangar, a strong wind blowing toward the hangar, directed the torch-like flame against the side of the building and ignited the roof covering. Owing to the great height of the roof — 170 feet — firemen from the ground were unable to reach the fire burning near the peak with hose streams. The asphalt roof covering burned un-



checked, at the upper level, for about an hour before being brought under control.

All wood parts of the hangar frame, except a runway which caught fire and burned, had been impregnated with fire - retardant chemicals — including the Pyresote formulation used by J. H. Baxter & Co.

A study of the fire damage shows the effectiveness of fire-retardant

pressure treated lumber. The treated wood deck proved to be a good fire barrier. For even though 3,000 square feet of the 2-inch decking was charred through and had to be replaced, flame spread was reduced to the point that only a relatively small area of the hangar was involved in the fire. This despite high winds and unavoidable delay by firemen in reaching the burning areas.

characteristics and advantages of **BAXCO-PYRESOTE**

*fire-retardant
plus protection against
decay and termites*

	DOUGLAS FIR LUMBER	PLAIN OR MAHOGANY-FACED DOUGLAS FIR PLYWOOD	REMARKS
Is deep penetration achieved through pressure treatment?	Yes	Yes	A century of experience has proved the effectiveness of pressure treatment
Is BAXCO-Pyresote fire-retardant treatment clean, odorless, colorless?	Slight yellowish brown discoloration	Slight yellowish brown discoloration	Portion of these products adjacent to separators for kiln-drying show an additional discoloration
Can BAXCO fire-retardant wood products be painted like untreated wood?	Yes	Yes	See painting recommendation on opposite page
Can BAXCO fire-retardant wood products be stained like untreated wood?	No	No	Staining will not cover discoloration caused by separators during kiln-drying
What are the flame-spread ratings by Underwriters' Laboratories, Inc.?	25	15	Underwriters' Laboratories, Inc. label giving flame-spread rating is affixed to each piece of plywood or lumber
What other protection does BAXCO-Pyresote pressure treatment offer?	Protection against termites and decay as well as against fire	Protection against termites and decay as well as against fire	
Are BAXCO fire-retardant materials kiln-dried after treatment?	Yes	Yes	See specification data

NOTE: BAXCO Protexol fire-retardant treatment of plain or mahogany faced Douglas fir plywood is available. This fire-retardant treatment has the same flame spread rating as BAXCO Pyresote but does not offer the same resistance to decay and termites. SPECIFICATIONS: All plywood is to be exterior type (plain or mahogany faced), pressure-treated

with BAXCO Protexol in accordance with Underwriters' Laboratories, Inc. requirements for a flame spread of 15. Each piece of plywood is to bear Underwriters' Laboratories, Inc. label. After treatment the plywood is to be kiln dried to a maximum moisture content of 18%. (A lower moisture content may be specified when necessary.)

specifications — **DOUGLAS FIR LUMBER**

All Douglas fir lumber specified herein shall be fire-retardant pressure treated with BAXCO-Pyresote in accordance with Underwriters' Laboratories, Inc. requirements for flame spread not over 25 and no evidence of significant progressive combustion in 30-minute test duration. Each piece of lumber is to bear an Underwriters' Laboratories, Inc. label. After treatment all 1" and 2" lumber shall be kiln-dried to a maximum moisture content of 18%. (A lower moisture content may be specified for clear lumber or special uses. Lumber thicker than 2" is to be kiln-dried sufficiently to remove most or all of the water injected during treatment.)

specifications — **WEST COAST HEMLOCK**

All West Coast hemlock lumber specified herein shall be fire-retardant pressure treated with BAXCO-Pyresote in accordance with Underwriters' Laboratories, Inc. requirements for a flame spread of 15 - 25. Each piece of lumber is to bear an Underwriters' Laboratories, Inc. label. After treatment all 1" and 2" lumber shall be kiln-dried to a maximum moisture content of 18%. (A lower moisture content may be specified for clear lumber or special uses. Lumber thicker than 2" is to be kiln-dried sufficiently to remove most or all of the water injected during treatment.)

specifications — **DOUGLAS FIR, PLYWOOD-PLAIN OR MAHOGANY FACED**

All plywood specified herein shall be exterior Douglas fir (plain or mahogany faced) fire-retardant pressure treated with BAXCO-Pyresote in accordance with Underwriters' Laboratories, Inc. requirements for a flame spread of 15. Each piece of plywood is to bear an Underwriters' Laboratories, Inc. label. After treatment the plywood is to be kiln-dried to a maximum moisture content of 18%. (A lower moisture content may be specified when necessary.)

Helpful Notes

1. Fire-retardant chemicals injected into the wood are hydroscopic by nature. Consequently, lumber and plywood so treated must be protected from high humidities and damp or exposed storage to avoid subsequent painting problems.
2. At time of shipment BAXCO fire-retardant pressure treated forest products are more than sufficiently dry for satisfactory painting. Careful handling and proper protection from moisture during storage will keep the surfaces dry.
3. BAXCO fire-retardant pressure treated lumber is non-toxic to human beings and if installed according to recommendations, is not corrosive to hardware or metal fasteners.
4. Do not install BAXCO fire-retardant pressure treated lumber and plywood in places of high humidity.
5. To avoid the possibility of the fire-retardant materials picking up moisture, apply a prime coat or sealer to all sides and edges immediately upon arrival at job-site. Apply a prime coat when fire-retardant materials are placed in contact with green plaster.
6. Care should be taken in cutting fire-retardant pressure treated forest products as they have a tendency to dull tools. Carbide tipped tools are helpful.
7. Planing or remanufacturing BAXCO Pyresote fire-retardant pressure treated Douglas fir or hemlock lumber is not recommended and does not comply with Underwriters' Laboratories Inc. requirements.

J. H. Baxter & Co. . . .

has over half a century of experience in the field of treating forest products. Throughout the years the Company has maintained its reputation for leadership by the dependable quality of its pressure treated materials, and through its development of improved treating methods, as well as process machinery on which it owns patents.

other preservative treatments available

J. H. Baxter & Co. maintain five large pressure-treating plants, and many storage yards, strategically located along the Pacific Coast, from Long Beach, California, to Seattle, Washington. These plants produce pressure treated lumber and plywood for a wide variety of industrial and other uses. Besides the fire-retardants, many different preservative treatments are available. These include:

*Coal-Tar Creosote; Creosote-Petroleum Mixture;
Pentachlorophenol; Ammoniacal Copper Arsenite
(Chemonite); and CZC (Chromated Zinc Chloride)*

prompt, economical shipments anywhere

The treating plants and storage facilities of J. H. Baxter & Co. are served by major railroads and truck lines. This provides economical treating in transit rates, and assures speedy delivery anywhere in the United States. Baxter plants are also well situated for export shipments from West Coast ports.

Write for literature, information or prices.

J. H. BAXTER & CO.

Main Office:

120 Montgomery Street
San Francisco 4, California

Branch Offices:

Los Angeles, California
Portland, Oregon
Eugene, Oregon

Seattle, Washington
Omaha, Nebraska
Minneapolis, Minnesota

Canadian Affiliate:

J. H. Baxter & Co., Ltd.
Vancouver, B. C.

Available pressure treated products:

poles,
crossarms,
piling,
railroad ties,
lumber,
timber and
plywood.



Digitized by:



ASSOCIATION
FOR
PRESERVATION
TECHNOLOGY,
INTERNATIONAL
www.apti.org

BUILDING
TECHNOLOGY
HERITAGE
LIBRARY

<https://archive.org/details/buildingtechnologyheritagelibrary>

From the collection of:

Carol J. Dyson, AIA